

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE HONORABLE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the Application of

Junichi UENO

Group Art Unit: 3727

Application No.: 10/549,453

Examiner: R. ROSE

Filed: September 14, 2005

Docket No.: 125333

For: WAFER-HOLDING CARRIER, DOUBLE-SIDE POLISHING APPARATUS USING  
THE SAME, AND DOUBLE-SIDE POLISHING METHOD OF WAFER

Reply Brief noted.

OK TO ENTER: /R.R./  
02/27/2009

REPLY BRIEF

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The following remarks are directed to the new points of argument raised in the  
Examiner's Answer dated December 3, 2008.

I. **STATUS OF CLAIMS**

Claims 11 and 19-31 are on appeal.

Claims 11 and 19-31 are pending.

No claims are allowed, and no claims are objected to only for being dependent from a rejected base claim, but are otherwise indicated to be allowable.

Claims 11 and 19-31 are rejected.

No claims are withdrawn from consideration.

Claims 1-10, 12-18, and 32-34 are canceled.

**II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

The following grounds of rejection are presented for review:

- 1) Claims 11 and 19–31 are rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement;
- 2) Claims 11, 19, 23, 27, and 31 are rejected under 35 U.S.C. §102(b) as being anticipated by JP 10-180623 to Susumu et al. ("Susumu");
- 3) Claims 11, 19, 21, 23, 25, 27, 29 and 31 are rejected under 35 U.S.C. §103(a) as obvious over Susumu; and
- 4) Claims 20, 22, 24, 26, 28 and 30 are rejected under 35 U.S.C. §103(a) as obvious over Susumu in view of JP 10-202511 to Fuminari et al. ("Fuminari").

### III. ARGUMENT

As explained in detail below, the Examiner's Answer continues to fail to provide any evidence or reasoning why one of skill in the art would not recognize from the original disclosure that Appellants were in possession of, as of the filing date of the application, the specific subject matter of claim 11. Next, the Examiner's Answer fails to establish that Susumu teaches each and every limitation recited in the rejected claims. In addition, the Examiner's Answer continues to interpret the applied references for more than they disclose, and unreasonably modifies Susumu without the requisite articulated reasoning and rational underpinning to support a conclusion of obviousness. Furthermore, Appellants respectfully submit that the Examiner's Answer improperly asserts and/or modifies features that would not have been obvious based on the disclosures of the references, or any objective evidence of record, because the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose. Finally, Appellants note that the Examiner has not provided an English-language translation of any parts of the Susumu reference other than the abstract to support any of the rejections. See MPEP §1207.02.

Accordingly, this Honorable Board should reverse the rejection of claims 11 and 19-31.

#### 1. The rejection of claims 11 and 19-31 for failing to comply with the written description requirement of 35 U.S.C. §112, first paragraph is improper

Apart from the inclusion of *In re Wilder*, 736 F.2d 1516, 222 USPQ 369 (Fed Cir. 1984) in the Grounds of Rejection (§9), the Examiner's Answer substantially repeats portions of the 35 U.S.C. §112 rejection contained in the October 31, 2007 and June 11, 2008 Final Rejections and inserts them in the Grounds of Rejection and Response to Argument sections (§§9 and 10, respectively). Appellants address the Examiner's improper reliance on *In re Wilder* below.

Appellants respectfully submit that *In re Wilder* does not support the Examiner's position. The *In re Wilder* decision addressed the description requirement found in 35 U.S.C. §112 and stated (emphasis added):

The description requirement is found in 35 USC §112 and is separate from the enablement requirement of that provision. In re Bowen, 492 F.2d 859, 864, 181 USPQ 48, 52 (CCPA 1974); In re Smith, 481 F.2d 910, 914-15, 178 USPQ 620, 623-25 (CCPA 1973). It is not necessary that the claimed subject matter be described identically, but the disclosure originally filed must convey to those skilled in the art that applicant had invented the subject matter later claimed. In re Kaslow, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed.Cir. 1983). Precisely how close the original description must come to comply with the description requirement of section 112 must be determined on a case by case basis. In re Smith, 458 F.2d 1389, 1395, 173 USPQ 679, 683 (CCPA 1972).

*Id.* at 372.

The Board of Appeals in *In re Wilder* affirmed the rejection of claims 14-16 for inadequate description to support generic claims that do not require synchronous scanning. *Id.* The Appellants in *In re Wilder* admitted that the synchronous scanning equipment is the only embodiment of the invention disclosed in the original patent. *Id.* On further appeal, the Federal Circuit in *In re Wilder* affirmed the Board's decision because Appellants' evidence consisting of: (1) a description of one of the drawings says that dictation apparatus illustrated in the drawing is "one in which the present invention finds ready application;" (2) the title of the patent "Instruction Indicating Apparatus For A Record And/Or Playback Device" is quite broad; and (3) statements in the Objects of the Invention section such as "it is an object of the present invention to provide improved indicating apparatus for indicating the location of particular information on a record medium which overcomes the aforenoted problems," did not show that the generic invention of claims 14-16 was supported by the original patent's disclosure in such a way as would indicate possession, as of the original filing date, of that generic invention. *Id.* at 372-373.

This differs from the facts of the instant case where the claims are not rejected for inadequate description to support generic claims. Instead, Appellants are merely excising from the scope of the claims [what the Examiner asserts is] the invention of another, to which they are not entitled. Thus, the question is not one of support of broader genus claims or criticality (as asserted by the Examiner) but whether the broader disclosed range describes the recited narrower claimed range. As discussed in the arguments presented in the September 10, 2008 Appeal Brief, this issue was more squarely addressed by the *In re Wertheim* court:

Claims 2, 37, and 38, which claim a solids content range of "between 35% and 60%," present a different question. They clearly claim a range within the described broad range of 25% to 60% solids; the question is whether, on the facts, the PTO has presented sufficient reason to doubt that the broader described range also describes the somewhat narrower claimed range. We note that there is no evidence, and the PTO does not contend otherwise, that there is in fact any distinction, in terms of the operability of appellants' process or of the achieving of any desired result, between the claimed lower limit of solids content and that disclosed in the Swiss application. We see an important practical distinction between broad generic chemical compound inventions, for example, as in *In re Ruschig*, *supra*, in which each compound within the genus is a separate embodiment of the invention, and inventions like that at bar, in which the range of solids content is but one of several process parameters. What those skilled in the art would expect from using 34% solids content in the concentrated extract prior to foaming instead of 35% is a different matter from what those skilled in the art would expect from the next adjacent homolog of a compound whose properties are disclosed in the specification. We wish to make it clear that we are not creating a rule applicable to all description requirement cases involving ranges. Where it is clear, for instance, that the broad described range pertains to a different invention than the narrower (and subsumed) claimed range, then the broader range does not describe the narrower range.

*In re Wertheim*, 191 USPQ 90, 98 (CCPA 1976).

Here, similar to *Wertheim*, the Examiner in this case has failed to present evidence that the previously claimed broader described range pertains to a different invention than the narrower (and subsumed) claimed range or any other evidence or reasoning showing why one

of skill in the art would doubt that Appellants invented or were in possession of the narrower claimed range from the disclosure of the broader range and the specific embodiments therein found in the original disclosure. Instead, the Examiner has done nothing more than argue lack of literal support, which is not sufficient to support the written description rejection.

For at least these reasons, and those presented in the September 10, 2008 Appeal Brief, Appellants respectfully submit that the amendments to claim 11 to narrow the recited range of the total area of polishing agent-passing holes to be "more than 20% and 30% or less" did not introduce new matter into the claim, as the narrower range is sufficiently supported by the specification. Accordingly, Appellants request that the rejection of claims 11 and 19-31 under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement be reversed.

## **2. Claims 11, 19, 23, 27, and 31 are not anticipated by Susumu**

The Grounds of Rejection section (§9) of the Examiner's Answer substantially repeats the 35 U.S.C. §102 rejection contained in the October 31, 2007 and June 11, 2008 Final Rejections. In the Response to Arguments section (§10) the Examiner's Answer asserts that:

- (1) the Appellant's attempt to contrast polishing with lapping is incorrect because it is well-known throughout the wafer processing art that polishing and lapping are used interchangeably to denote an abrading process, and these terms are regarded as synonymous, and are interchangeable;
- (2) Appellant had amended claim 11 during prosecution to further introduce the additional limitation, of an upper limit of total hole sizes being 30% or less or a main surface of the carrier and this limitation appears to be met by the arrangement of holes in Susumu and it is clear from figure 4 of Susumu that holes size ratios greater than 20% were produced, and include holes size ratios within the claimed range; and
- (3) it is clear from figure 4 that carriers with holes size ratios greater than 20% were made since Susumu discusses the formation of cracks in the higher ranges of holes size ratios, clearly this could not be found other than by manufacturing such carriers and testing them.

Claim 11 is not anticipated because the Examiner has failed to establish that Susumu teaches each and every limitation recited in the rejected claims.

Independent claim 11 recites (emphasis added):

A wafer-holding carrier which is used when holding wafers between an upper turn table and a lower turn table to which polishing pads are attached, and polishing both sides of the wafers by a polishing agent, wherein the carrier has polishing agent-passing holes for passing the polishing agent through as well as wafer-holding holes for containing and holding the wafers, and the total area of the polishing agent-passing holes occupies more than 20% and 30% or less of a main surface of the carrier, and each of the polishing agent-passing holes has a circular shape and a diameter of 5 mm - 30 mm.

Susumu does not disclose such a combination of features.

Specifically, claim 11 was amended in the March 2008 Amendment to recite, "each of the polishing agent-passing holes has a circular shape and a diameter of 5 mm - 30 mm." This was the subject matter of claim 13, which was not rejected as anticipated by Susumu. The Examiner failed to assert in the Final Rejection and also fails to establish any fact in the Examiner's Answer that Susumu discloses this limitation added to claim 11.

Next, the allegations that it is well-known throughout the wafer processing art that polishing and lapping are used interchangeably to denote an abrading process, and these terms are regarded as synonymous and are interchangeable, are not only lacking support in the art, they are technically inaccurate. For example, colloidal silica, which is a very fine abrasive material, may be used for polishing silicon wafers. *See* specification, page 24, lines 2-7. On the other hand, lapping utilizes a much coarser abrasive, such as the artificial emery. Thus, the allegations in the Examiner's Answer lacks merit, as confirmed by the fact that the Examiner has not cited any supporting reference describing that it is well-known throughout the wafer processing art that the terms polishing and lapping are used interchangeably or regarded as synonymous.

Furthermore, the Examiner has not provided an English-language translation of any parts of the reference other than the abstract to support its assertions. See MPEP §1207.02 (relevant portions reproduced below for convenience).

If a document being relied upon by the examiner in support of a rejection is in a language other than English, a translation must be obtained so that the record is clear as to the precise facts the examiner is relying upon in support of the rejection. The translation should be obtained prior to the appeal conference so that the participants of the appeal conference can consider the translation. The examiner should reference the pertinent portions of the translation at least in the grounds of rejection section of the answer. See MPEP § 706.02 for reliance upon abstracts and foreign language documents in support of a rejection.

In regards to the other assertions in Response to Arguments section (§10), the Examiner's Answer substantially repeats portions of the argument contained in the October 31, 2007 and June 11, 2008 Final Rejections. Therefore, in addition to the arguments presented above, Appellants rely on the arguments presented in the September 10, 2008 Appeal Brief.

Accordingly, reversal of the anticipation rejection is respectfully requested.

3. **Claims 11, 19, 21, 23, 25, 27, 29 and 31 would not have been rendered obvious by Susumu; and claims 20, 22, 24, 26, 28 and 30 would not have been rendered obvious by Susumu in view of Fuminari**

Apart from mentioning that the limitations of dependent claims 22 and 30 have not been argued separately and will stand or fall with the independent claim, the Examiner's Answer substantially repeats portions of the 35 U.S.C. §103 rejection contained in the October 31, 2007 and June 11, 2008 Final Rejections and inserts them in the Grounds of Rejection and Response to Argument sections (§§9 and 10, respectively). As asserted in the September 10, 2008 Appeal Brief and reiterated here, if the wafer carriers disclosed by Susumu are modified as proposed by the Examiner, this would result in wafers that are cracked during a lapping process, which would be contrary to the intended purpose of

Susumu's invention. It is well settled that if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Thus, in addition to the above argument, Appellants rely on the arguments presented in the September 10, 2008 Appeal Brief.

Accordingly, reversal of the obviousness rejections are respectfully requested.

**I. CONCLUSION**

For all of the reasons presented in Appellants' Appeal Brief and above, Appellants respectfully request this Honorable Board to reverse the rejections of claims 11 and 19-31.

Respectfully submitted,



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WPB:BSP

Attachment:  
Request for Oral Hearing

Date: January 9, 2009

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